REMARKS

Claims 1-39 are pending in the application. Claims 1, 3, 6-8, 10, 14, 17, 18-23, 25-26, and 35 were rejected, and the remaining claims were objected to. Claims 26 and 36 have been amended herein to correct typographical and grammatical errors. In view of the amendments and the following arguments, Applicants respectfully request reconsideration of the application.

Claim Rejections – 35 USC § 102

Claims 1, 3, 6-8, 10, 14, 17, 18, 24, 27-30, 34, 36, 37 and 39 were rejected under 35 U.S.C. § 102(e) as being anticipated by Connor et al., U.S. Patent No. 6,011,851 ("Connor"). Applicants respectfully traverse this rejection as Connor fails to teach all elements of any rejected claim.

Claim 1 is drawn to a packet voice conferencing method. Claim 1 requires receiving two packet voice data streams from two conferencing endpoints and mapping voice data from those streams to presentation mixing channels. Although Connor teaches a system and method for mapping multiple sound sources to different points in a sound field, Connor does not teach a packet voice front end for his system to receive and decode the sound sources from packet streams. Claims 1 and 6 are therefore not anticipated by Connor.

Claim 3 contains additional limitations not found in Connor. Although Connor forms one set of mixed channels, claim 3 forms three sets of mixed channels and transmits them respectively to three conferencing endpoints.

Claims 7, 14, and 17 are patentable for the same reasons as claim 1. Claims 8 and 10 are patentable for the same reasons as claim 3.

Claim 18 contains additional limitations not found in Connor. As defined in claim 7, a *sector* of the sound field relates to one of the packet voice streams. Claim 18 adds the capability for the listener to split a sector into subsectors that can be independently manipulated within the sound field. The Examiner asserts that Connor "teaches sector division by showing differently located sources (Fig. 2)." In Figure 2, Connor can change the locations of sources, but cannot split a single source into two independently manipulatable sources. Referring to Figure 5, Connor clearly can only manipulate individual telephone lines, and not splits of a single line.

Claims 24 and 27 are patentable for the same reasons as claim 1.

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Claim 28 not only contains limitations related to packet voice data streams like claim 1, but explicitly recites first and second decoders to decode packet voice data streams and a packet switch to distribute packets to the two decoders. Connor fails to teach packet voice decoders or a packet switch. Claims 28, 30, and 34

Claim 29 is patentable for the same reasons as claims 28 and 3.

Claim 36 recites a packet voice data stream decoder that decodes a voice arrival direction corresponding to a set of decoded voice data channels, and a controller that selects a sound field subsector based on the voice arrival direction. The Examiner asserts that "Connor teaches the voice arrival direction associated with each source (col. 3, lines 58-63)." The portion of Connor referred to describes spatial processors that "simulate[] a different spatial characteristic for the sound source on the connected output of the switching circuit 28." (col. 3, lines 62-65.) This is clearly not a <u>decoding</u> of an existing voice arrival direction, but a mapping of a monaural source to a desired voice arrival direction.

Claim 37 recites the explicit communication of voice arrival direction in the packet voice data stream. Connor contains no such teaching.

Claim 39 recites a packet voice conferencing system including a controller to negotiate with other packet voice conferencing systems. The negotiation results in a codec to be used for encoding local audio capture channels and in a presentation sound field sector allocated to the local audio capture channels. The system maps the local audio capture channels to a set of presentation mixing channels according to the allocated sound field sector and encodes the presentation mixing channels. To Applicants' reading, Connor does not teach encoding at all, much less the specific steps contained in claim 39.

In summary, Applicant respectfully requests that the Section 102 rejection of claims 1, 3, 6-8, 10, 14, 17, 18, 24, 27-30, 34, 36, 37 and 39 be withdrawn because Connor fails to teach all elements of any of the rejected claims.

Claim Rejections – 35 USC § 103

Claims 19-23, 25-26, and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Conner. Applicant respectfully traverses this rejection on the grounds that a *prima facie* case of obviousness is lacking for any rejected claim.

Applicant first notes that the Section 103 rejection appears to rely on the Section 102 rejection above, for which Applicants have identified a number of elements that are neither taught not suggested by Connor. A *prima facie* case of obviousness requires a showing that

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these elements are obvious in view of Connor, and this showing does not appear in the Office Action.

Further, the Examiner asserts that Connor teaches that control of Connor's system by GUI can include a wide variety of control functions in addition to those specified explicitly in Connor, and that specific GUI functions claimed by Applicants are therefore obvious. While Connor might present a general motivation to combine other features into his system, the Examiner concedes that Connor fails to teach the specific features recited in claims 19-23, 25-26, and 35.

A *prima facie* case of obviousness requires that each element of a rejected claim— including the features missing from Connor—must be found in the prior art. As the Examiner has not shown these features in the prior art, a *prima facie* case has not been set forth. The specific limitations of the rejected claims are clearly not obvious from Connor alone.

Claim 19 modifies the mapping of voice data to presentation channels based on a listener's GUI specification of his and the speaker locations in the room. Connor is silent on this feature.

Claim 20 recites providing visual indication to the user as to which endpoints are speaking. Connor is silent on this feature.

Claim 21 recites automatically allocating approximately equal shares of the sound field to each endpoint. Connor is silent on this feature.

Claim 22 recites tracking the number of conferencing endpoints and changing the allocation of the sound field accordingly. Connor is silent on this feature.

Claim 23 recites allocating a larger sector of the sound field to, e.g., a stereo conferencing endpoint. Connor is silent on this feature.

Regarding claim 25, Connor does suggest means for specifying different sound field positions for his sources, but claim 25 is patentable based on claim 24 from which it depends.

Claim 26 recites varying the specified sector of the presentation field for a packet voice data stream depending on a voice arrival direction derived for that packet voice data stream. Connor is silent on this feature. Also, see the discussion above regarding claim 36.

Claim 35 recites allowing the listener to divide a sector (corresponding to a conferencing endpoint) into subsectors that are independently manipulatable. Connor is silent on this feature. Also, see the discussion above regarding claim 18.

In summary, Applicant respectfully submits that a *prima facie* case of obviousness has not been presented for claims 19-23, 25-26, and 35. Applicant requests that the rejection be withdrawn and that the claims be allowed to proceed to issuance.
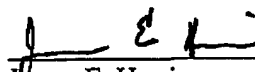
Allowable Subject Matter

Claims 2, 4, 5, 9, 11-13, 15-16, 31-33, and 38 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants acknowledge the indication of patentable subject matter in these claims. Because Applicants have traversed the rejection of the base claims, however, the objected-to claims have not been rewritten at this time.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-39 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.
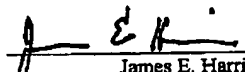
Respectfully submitted,

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> I hereby certify that this correspondence is being transmitted to the U.S. Patent and Trademark Office via facsimile number 703-872-9306, on February 8, 2004.
>
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